

## **December 2011 Weather Summary**

After November's strong winds and colder than normal temperatures, it was a relief that December delivered weaker, and fewer, wind events and returned temperatures and precipitation amounts closer to normal, falling only slightly below the 30-year respective averages. December's average temperature of 26.2 degrees F made it the third coldest month of 2011 with November being the coldest month (23.5 degrees F) and February being the second coldest (26 degrees F) month of the year. December had the lowest maximum temperature of the year with temperatures remaining below 42 degrees F. September and October were the only months that Seward received more precipitation than December.

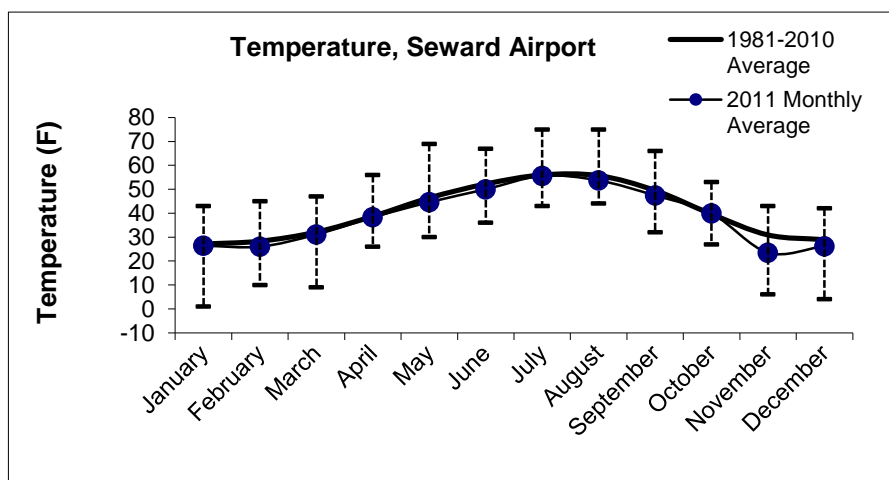
As recorded at the Seward airport, total precipitation for the month was 8.58 inches (90% of normal), .96 inches below the average monthly precipitation. The monthly average temperature was 26.2 degrees F; 2.7 degrees F below the 30- year average (1981-2010) for this month. December 4<sup>th</sup> was the warmest day of the month with a high of 42 degrees F; December 30<sup>th</sup> was the coldest day with a low of 4 degrees F. December 22<sup>nd</sup> was the windiest day at the Seward airport with an average wind speed of 21.1 mph and wind gusts up to 45 mph.

Also of note:

- The National Weather Service is looking for a Seward volunteer to participate in their [Cooperative Observer Program](#). Please contact Deb at Kenai Fjords National Park at 422-0544 for more information.
- A new report from the [National Weather Service in Anchorage](#) provides a look at this year's winter weather across Southcentral Alaska, including facts and a discussion on cause and effect.
- The [Winter 2011 issue of the Alaska Climate Dispatch](#) discusses the new 30 year normals and how these relate to climate change in Alaska. Overall, the updated normals are somewhat warmer in Alaska, with the greatest absolute warming in the winter and the most statistically significant warming in June. Changes in monthly precipitation are somewhat wetter with no change at any one station presenting a statistical significance.
- The journal [Nature](#) published new research indicating that permafrost thaw will have a greater effect on climate than previous modeling studies have predicted.
- New research into the Earth's paleoclimate history by NASA's Goddard Institute for Space Studies suggests the potential for rapid climate changes this century, including multiple meters of sea level rise, if global warming is not abated: [physorg.com](#)
- New research reported in the journal [Nature Geoscience](#) indicates that human emissions of carbon dioxide will defer the next Ice Age that, without these changes, would begin within 1,500 years.
- A new report from the [Intergovernmental Panel on Climate Change](#) evaluates the role of climate change in altering characteristics of extreme events, and assesses opportunities to reduce exposure and vulnerability and improve resilience to climate extremes.
- [NASA Earth Observatory](#) reports that 2011 was the 9<sup>th</sup> hottest in the past 130 years. Nine out of the ten warmest years have occurred since 2000.
- The [National Weather Service Climate Prediction Center's](#) one month weather outlook (January 2012) favors below normal temperatures and normal precipitation for the Kenai Fjords area. The three month outlook (Jan-Feb-Mar) predicts below normal temperatures and below normal precipitation.
- NOAA climate services portal serves as a single point-of-entry for NOAA's extensive climate information, data, products, services, and the climate science magazine [ClimateWatch](#)
- Additional, detailed climate information is available from the UAF Alaska Climate Research Center monthly state-wide summaries [http://akclimate.org/Summary/current\\_sum.html](http://akclimate.org/Summary/current_sum.html)

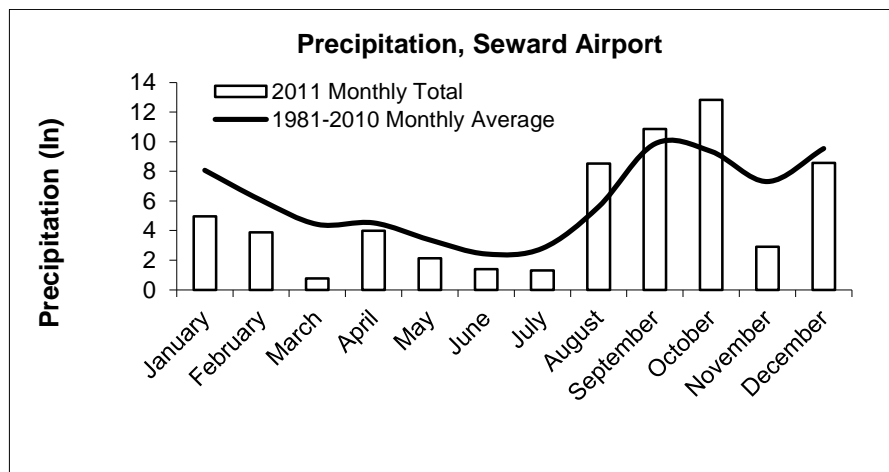
***Read more to find out about the local climate for December 2011***

### Seward Airport Temperature, December 2011 (station 26438)



Monthly and 30-year (1981-2010) average temperature (F) at Seward airport. Monthly average values are shown with thin solid line. The ranges of maximum and minimum daily temperatures for each month are shown with dashed vertical lines.

### Seward Airport Precipitation, December 2011



Monthly and 30-year (1981-2010) average precipitation (inches) at Seward. December precipitation amounts were closer to normal based on the 1981-2010 30-year average, and far exceeded November accumulations.

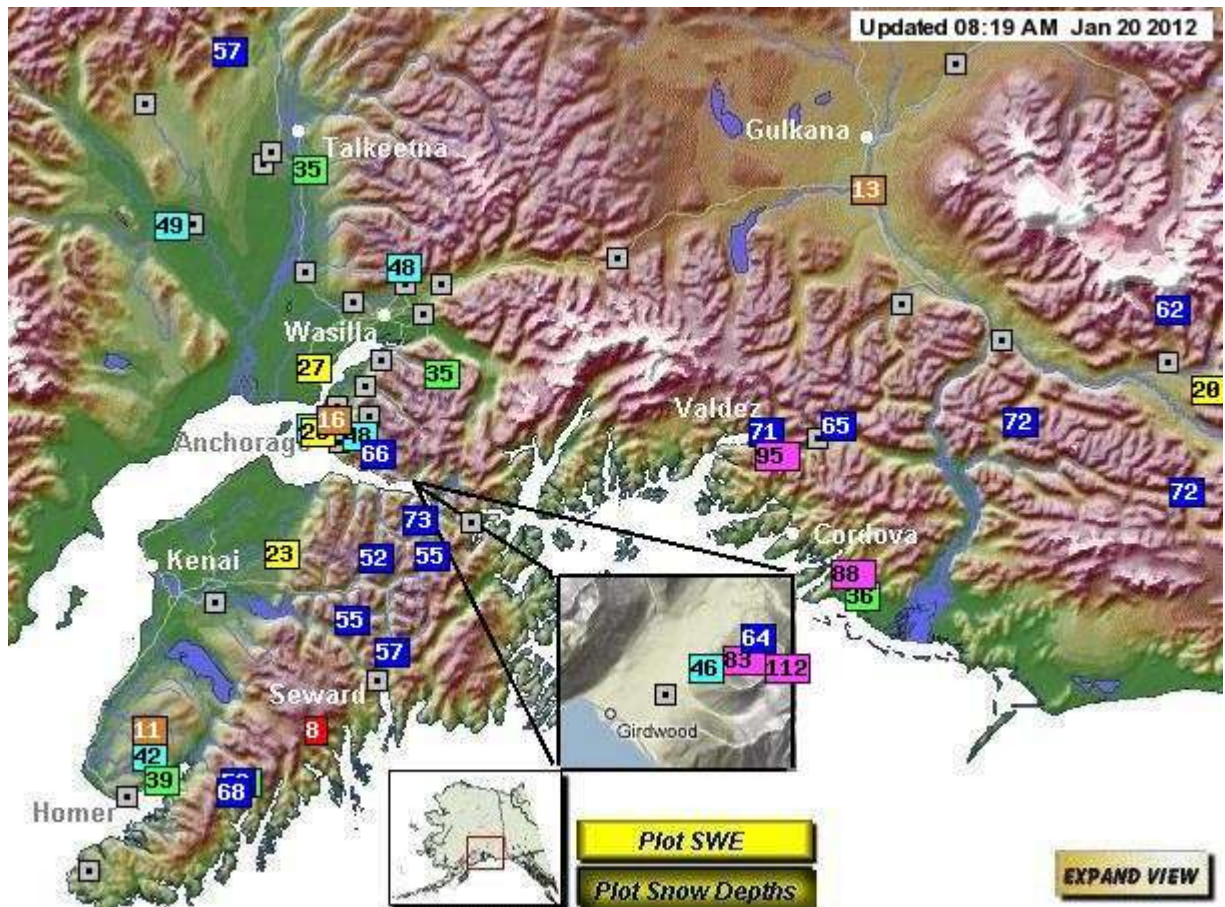
### Rivers

**Resurrection River** at Exit Glacier Bridge is monitored by the Alaska-Pacific River Forecast Center:

<http://water.weather.gov/ahps2/index.php?wfo=pafc>. Resurrection River stage height is currently well below the flood action stage.

**Exit Creek** water level (stage height) data is not collected in winter.

## Snow & Ice



Snow depths reported across southcentral Alaska on Jan. 20<sup>th</sup>: [http://aprfc.arh.noaa.gov/sd\\_pafc\\_sites.html](http://aprfc.arh.noaa.gov/sd_pafc_sites.html). Snow is monitored by the Natural Resources Conservation Service: <http://www.ambc.org/> with most measurements and reporting taking place December to May.

Snow depth at Exit Glacier on January 1<sup>st</sup> was 34 inches, 4.3 inches more than last year at this time, with a water equivalent of 9.3 inches.

**Weather Station data** (map of [some] stations [Western Region Climate Center](#) or [MesoWest](#))

[Seward Airport](#)  
[Seward Hwy MP#12](#)  
[Grouse Crk Divide](#)  
[Exit Glacier](#)  
[Exit Glacier SNOTEL](#)  
[Harding Icefield](#)  
[McArthur Pass](#)  
[Nuka Glacier](#)  
[Pilot Rock](#)  
[Buoy 76-Cape Cleare](#)

## **Weather Forecasts**

[Seward Summary](#)  
[Marine Forecast](#)  
[Surface Map](#)  
[Graphical Forecast](#)  
[4-8 Day Forecast](#)